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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: the Assistant Commissioner for Patents, Washington, D.C. 20231 on _________.

Glen P. Belvis, Reg. Nor. 81,735

Name of Applicant essignee of Registered Representative

Signature of above

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PATENT
Our Case No. 659/489

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Fell, et al.

Serial No. 09/215,951

Filing Date: December 18, 1998

For STRETCHABLE COMPOSITE

MATERIAL HAVING

CONTINUOUS GATHERS

Group Art Unit No. 1772

Examiner Chavalier, A.

AMENDMENT & RESPONSE

This is in response to the office action date mailed December 15, 2000.

I. AMENDMENT

Please amend claim 48 as follows:

48. (amended) A stretchable composite material comprising: a first layer, the first layer being a breathable material; a second layer, the second layer being a breathable material; at least two elastic members, the elastic members positioned in between the first and second layers; regions of securement securing the elastic members, the first layer and the second layer; the regions of securement further comprising attached zones and unattached zones; both the attached zones and the unattached zones extending traverse and across a majority of the elastic members; and, at least one of the unattached zones being located between two attached zones.

II. RESPONSE

A. Claims 1-12, 14-18 and 50

The examiner has rejected claims 1-12, 14-18 and 50 (as it depends from claim 1) as anticipated by Pieniak U.S. Patent No. 5,098,423. Specifically, at page three of the office action the examiner asserts that:

The elastics members have an extensibility to rupture of at least about 150% and a recovery at 50% elongation of at least 50%, which clearly may include composites having a maximum elongation of at least about 85%, 90% and 95%.

It appears that the examiner bases the above assertion on column 6, lines 28-32 of Pieniak, which provide:

The elastic members have an extensibility to rupture of at least about 150 percent, and a recovery at 50% elongation of at least about 50 percent, and preferably at least about 75 percent.

It is respectfully submitted that this teaching of Pieniak is entirely consistent with the teachings of applicants' specification, which distinguishes the prior art, and to the extent that it

relates to patentability at all, supports the patentability of applicants' claimed invention. In particular the applicants' specification provides that:

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For example, a panel made using 1/8 inch (3.2 mm) securement regions, spaced apart by 1/8 inch (3.2 mm) and having the elastic strands placed in under 250% elongation will have a maximum elongation length of about 240%. Thus, this composite would have a maximum elongation of about 96% of the elongation of the elastic material. Under the same conditions, it would be expected that a composite made by conventional techniques would have a maximum elongation length of about 212%. This conventional material would have a maximum elongation of about 84.8% of the elongation of the elastic member. Thus, the elastic composites of the present invention allow for a much greater use of the elongation put into the strands and provide for a material that for the same initial elongation can have a substantially larger maximum elongation. For example, the composite material of the present invention has an elongation of at least about 85% of the elongation of the elastic material, ideally at least about 90% of the elongation of the elastic material, and optimally at least about 95% of the elongation of the elastic material. [page 6 line 27 to page 7 line 10 (emphasis added)]

The disclosure of Pieniak does not teach or suggest a composite having a maximum elongation of at least about 85%. Pieniak does not address the relationship between the elongation of elastic members when a composite is made and the overall ability, or capacity, of that composite to elongate after it is made. To the contrary, the section of Pieniak that the examiner relies upon focuses on "percent retraction," which Pieniak defines as being based on the "length of sample measured three seconds after released from extended length." (Pieniak, col. 6, lines 17, & 22-23) "Percent retraction" has no relation to applicant's "percent maximum elongation." The substantial differences between these two can be illustrated by a comparison of the teachings of Pieniak with that of the present specification.

Pieniak's Teachings (col. 6, lns 15-32)

At 75 "percent retraction"

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 $L_0 = 100$ (original length of sample)

 $L_e = 150$ (fully extended length)

 $L_t = 112.5$ (length of sample measured three seconds after released from extended length)

$$75 = \frac{150 - L_t}{150 - 100} \times 100^{-1}$$

$$0.75 = \frac{150 - L_t}{50}$$

$$37.5 = 150 - L_t$$

$$L_t + 37.5 = 150$$

$$L_t = 112.5$$

Teachings of the present specification

 $L_{ee} = 350$ (elongation of elastics prior to placement in composite)

L_{er} = 100 (length of elastics in relaxed state prior to elongation for placement in composite structure)

L_{md} = 297.5 maximum elongation of composite structure

Percent Maximum Elongation* = L_{md} ÷ L_{ee} x 100

Thus, in the example of the specification, set out herein, the composite would have a maximum elongation of 85%

Plieniak's teachings with respect to "percent retraction" have no bearing on, or relationship to, applicants' claimed percentage maximum elongation. As set forth above, these two features look to entirely different properties of the composites. Pieniak looks to the behavior of the structure three seconds after it is released from tension. On the other hand, applicants look to the relationship between the elastic elements being placed in the structure and that structures maximum elongation.

Thus, Pieniak's teachings and applicants' claimed invention are not identical or substantially identical in structure or composition, and are not produced by identical or

^{*} The claim term at issue is "a maximum elongation of at least about 85 %"

substantially identical processes as asserted by the examiner. To the contrary, Pieniak and applicants are at the opposite ends of the spectrum—Pieniak looks to retraction—applicants look to elongation. Accordingly, it is respectfully submitted that Pieniak does not provide the *prima facie* showing that would render applicants' claimed invention unpatentable under the legal doctrine set forth in *In re Spada*, 911 F.2d 705, 709, 15 U.S.P.Q.2d 1655, 1658 (Fed. Cir. 1990).

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The examiner has also rejected claims 1-12, 14-18 and 50 as anticipated by Kielpikowski U.S. Patent No. 6,056,733. Specifically, on page three of the office action the examiner asserts that:

The elastomeric thread comprises any elastomeric material capable of being at least about 50%, desirably about 350% and capable of recovering to within at least 250%, desirably about 150% of its original length after being elongated about 300%.

It appears that the examiner is relying up the following provision of Kielpikowski:

As representatively illustrated in FIGS. 1-3, the barrier layer 20 is stitched with a single elastomeric thread 22 adjacent the distal edge 14 of the containment flap 10. Alternatively, the barrier layer 20 may be stitched with from about 2 to about 10 elastomeric threads. Multiple elastomeric threads may be configured in a laterally spaced, generally parallel arrangement. Suitably, the elastomeric thread 22 or threads are configured parallel to the distal edge 14 of the containment flap 10 and are located within about one inch (25 mm) of the distal edge 14.

The elastomeric thread 22 suitably comprises any elastomeric material capable of being elongated at least about 50 percent, desirably about 350 percent, and capable of recovering to within at least about 250 percent, desirably about 150 percent of its original length after being elongated about 300 percent. In one specific embodiment, the elastomeric thread can, for example, be composed of a spandex elastomeric thread such as, for example, a 470 decitex LYCRA thread commercially available from E.I. Dupont de Nemours and Co. Alternatively, the elastomeric thread 22 can be composed of a thermoplastic elastomer or a natural or synthetic rubber commercially available from J.P.S. Elastomerics Corp. The elastomeric thread

22 can also be composed of a heat activatable elastic material such as PEBAX, commercially available from Atochem, Inc., which can be activated with heat treatment after the barrier layer 20 is stitched with the thread 22.

In a specific embodiment of the present invention, the barrier layer 20, as representatively illustrated in FIGS. 1-3, can be **stitched with an elastomeric thread** 22 substantially along the entire length 18 of the containment flap 10. Alternatively, the barrier layer 20 can be stitched with the elastomeric thread 22 along a portion of the length 18 of the containment flap 10. For example, the barrier layer 20 may be stitched along at least about 60 percent of the length 18 of the containment flap 10. The ends of the elastomeric thread can be attached to the barrier layer by any method known to those skilled in the art such as thermal bonding, adhesive bonding, ultrasonic bonding, knotting or the like. Alternatively, the ends of the elastomeric thread may be contained when the barrier layer is attached to an absorbent article. [col. 4 line 53 to col. 5 line 27 (emphasis added)]

This teaching of Kielpikowski is even further removed from applicants' claimed invention than Pieniak.

First, this teaching from Kielpikowski is directed to the use of an elastic thread to stitch materials together. Using thread to stitch two materials together is substantially different from applicants' claimed invention. On this basis alone, it is respectfully submitted that the examiner's assertion that the above provision of Kielpikowski is identical in structure or composition, or is produced by identical or substantially identical processes to applicants' claimed invention cannot be maintained.

Moreover, Kielpikowski's teaching with respect to its sewing thread is limited to how the thread, by itself, can be stretched and relaxed. It does not appear that Kielpikowski provides any teaching or suggestion about the relationship of an elongated thread to the maximum elongation of an ultimate product. As such, Kielpikowski provides no teaching or suggestion that even remotely relates to applicants' claimed percentage maximum elongation.

Thus, Kielpikowski 's teachings and applicants' claimed invention are not identical or substantially identical in structure or composition, and are not produced by identical or substantially identical processes as asserted by the examiner. To the contrary, Kielpikowski and applicants are unrelated— Kielpikowski looks to how its sewing thread performs before being stitched into a completed structure—applicants look to how the condition of its elastic elements at the time of manufacture relate to the maximum elongation of the completed structure.

Accordingly, it is respectfully submitted that Pieniak does not provide the *prima facie* showing that would render applicants' claimed invention unpatentable under the legal doctrine set forth in *In re Spada*, 911 F.2d 705, 709, 15 U.S.P.Q.2d 1655, 1658 (Fed. Cir. 1990).

B. Claim 48 and 50

Claim 48 as now amended and claim 50 (as it depends from claim 48) are clearly distinguishable over Pieniak and Kielpikowski. Neither Pieniak or Kielpikowski disclose or suggest the transverse zones of attachment separated by transverse zones of unattachment as now claimed by applicants.

C. Conclusion

Accordingly, applicants submit that the pending claims encompass patentable subject matter.

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Respectfully submitted,

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